



COSMO BIO CO., LTD.

## PRODUCT DATA SHEET

**Product:** Anti-AIF (IN) , Apoptosis inducing factor, Polyclonal

**Cat. No:** PC-079 (100 µg)

### Background:

Apoptosis is characterized by several morphological nuclear changes including chromatin condensation and nuclear fragmentation. These changes are triggered by the activation of members of caspase family, caspase activated Dnase, and several novel proteins (1). A novel gene, the product of which causes chromatin condensation and DNA fragmentation, was recently identified, cloned, and designated apoptosis inducing factor (AIF) (2). Like the critical molecules, cytochrome c and caspase-9, in apoptosis, AIF localizes in mitochondria. AIF translocates to the nucleus when apoptosis is induced and induces mitochondria to release the apoptogenic proteins cytochrome c and caspase-9. AIF induces chromatin condensation and DNA fragmentation, which are the hallmarks of apoptosis, of the isolated nucleus and the nucleus in live cells by micro-injection. AIF is highly conserved between human and mouse and widely expressed. (2).

### Specificity:

This antibody reacts with AIF.

K562 cell lysate can be used as a positive control in western blot and a 67 kDa band should be detected.

### Species Reactivity:

Human, mouse and rat. Other species not tested.

### Immunogen:

This antibody was raised against a peptide corresponding to amino acids 517 to 531 of human AIF (2). This sequence is exactly the same for mouse and rat AIF (2).

### Format:

Rabbit polyclonal antibody against human AIF (internal fragment). It is available at a concentration of 100 µg/200 µl in PBS containing 0.02% sodium azide. Purified by ion exchange chromatography.

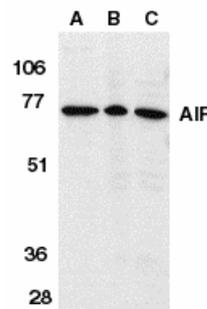
### Storage and Stability:

Stable for up to 12 months when stored at 4°C.

### Applications and Suggested Dilutions:

■ Western blotting: Use at 0.25 to 1 µg/ml.

The optimal dilution for a specific application should be determined by the researcher.



Western blot analysis of AIF in K562 cell lysate (A), rat heart (B), and mouse heart (C) tissue lysates with anti-AIF (IN) at 1 µg/ml.

### Limitations:

For *in vitro* research use only. Not for use in diagnostics or in humans.

### Warranty:

No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.